

**Exhibit 4**

June 1, 2021

Mr. Michael Darling
Arnold & Itkin, LLP
6009 Memorial Dr.
Houston, TX 77007

Re: Brandon Jenkins vs./ Helmerich & Payne, Inc., Helmerch & Payne International Drilling Co., WPX Energy Production, LLC., WPX Energy Permian, LLC., and WPX Energy Services Company, LLC.

Dear Mr. Darling:

Please accept the following summary report as it relates to Mr. Brandon Jenkins' slip and fall event which occurred on August 24, 2019. In preparing this report, I reviewed the following documents provided to me by your office: The Plaintiff's 1st and 2nd Amended Complaints, The Deposition transcript of Mr. Brandon Jenkins, Plaintiff's Initial Disclosures, Defendant A.L.P., Inc's Initial Disclosures, Defendant Helmerch & Payne International Drilling Co's First Amended Rule 26(a)(1) Initial Disclosures, Defendants' WPX Energy Production, LLC, WPX Energy Permian, LLC, and WPX Energy Services Company LLC, Rule 26(a)(1) Initial Disclosures, Defendants' WPX Energy Production, LLC, WPX Energy Permian, LLC, and WPX Energy Services Company LLC, Answers to Plaintiff's Interrogatories, Defendants' WPX Energy Production, LLC, WPX Energy Permian, LLC, and WPX Energy Services Company LLC, Responses to Plaintiff's Request for Admissions, Defendants' WPX Energy Production, LLC, WPX Energy Permian, LLC, and WPX Energy Services Company LLC, Responses to Plaintiff's Request for Production, HSE Standards & Guidelines, Plaintiff's medical records, and photographs of the location where Mr. Jenkins slipped and fell.

Background:

It is my understanding that at approximately 5:30 a.m. on August 24, 2019 Mr. Brandon Jenkins was a drill site manager working for the MS Directional Company and was working on land rig 267 near Mentone, Texas. WPX Energy Permian, LLC owned the oil lease and WPX Energy Production LLC contracted with Helmerch & Payne to drill the well. It is my further understanding that the Defendant Helmerch & Payne International Drilling Company operated the rig and were responsible for maintaining the oil rigs stairways.

As Mr. Jenkins was descending a steel stairway on the rig his right foot suddenly and unexpectedly slipped out from beneath him as to cause his right leg to extend forward resulting in serious injury. Mr. Jenkins arrested his fall by holding onto a mounted handrail. At the time of his fall the stairway was heavily soiled with mud and water. Mr. Jenkins was wearing a pair of work boots which were in good condition. No investigation occurred as it relates to the Plaintiff's slip and fall event. It was dark outside and the stairway in question was poorly lighted. The weather was cloudy and foggy and there was dew in the air.

Credentials:

I am President of Traction Experts, Inc., and Past President of Traction Plus, Inc. I have worked in the slip-and-fall prevention industry since 1990. I started working at the Adleta Company, a regional distributor of Armstrong World Industries line of floor coverings located in Carrollton, Texas as a Contact Sales Manager. I was responsible for managing a multi million-dollar commercial flooring account base. I developed both retail and commercial markets for Armstrong World Industries in the North Texas Region for residential and commercial flooring products. I trained and supervised the installation and recommended maintenance procedures for my clients. I trained local and regional architectural and design firms to promote commercial flooring materials, requiring extensive knowledge of Armstrong's flooring products; Armstrong's competitors' products; safety features/advantages of each; and how they related to floor safety and the prevention of slip-and-falls.

Since 1990, I have:

- a. Specialized in floor safety and the investigation, cause determination, and prevention, of slip-and fall accidents in the work place;
- b. Consulted with numerous businesses in the retail market as a floor safety, slip-and-fall prevention consultant, including Wal-Mart, McDonald's Restaurants, Pier 1 Imports, Drug Emporium, Seven-Eleven Convenience Stores, Stop 'n Go Convenience Stores, and Target Stores;
- c. Acted as a floor safety, slip-and-fall prevention consultant with numerous insurance firms, including Liberty Mutual, AIG, Reliance National, Travelers, and CNA;
- d. Been retained as an expert witness in more than 1000 litigation matters involving floor safety and slip-and-fall investigation, prevention, and causation; and have been qualified as an expert in approximately 40 trials
- e. Testified as an expert in floor safety, slip-and-fall investigations, and slip-and-fall prevention in approximately two hundred depositions;
- f. Investigated hundreds of slip-and-fall accidents and identified unsafe flooring, floor matting, or floor maintenance materials; determined why an accident or injury may have occurred; determined whether an employer complied with relevant safety and health standards; determined whether the safety equipment and signage were in compliance with such standards; and explored ways each slip-and-fall accident could have been prevented;
- g. Attended numerous seminars and conferences relating to slip-and-fall prevention, investigation, and causation. These conferences were conducted by the National Safety Council, The American Society for Testing and Materials (ASTM), Liberty Mutual Insurance, and the American National Standards Institute (ANSI) to name a few;

- h. I have taught slip-and-fall causation, prevention and investigation techniques at the National Floor Safety Institute. I have lectured on such subjects at numerous safety and industry trade association conferences.
- i. I have investigated hundreds slip-and-fall accidents in the workplace. I have consulted with multiple major retail chains, including: McDonald's, KFC, Burger King, Target, Wal-Mart, Pier 1 Imports, and Drug Emporium, regarding causation and prevention of the high frequency of slip-and-falls these stores were experiencing in high-traffic aisles where floor mats were being used;

I have studied, and am familiar with, all relevant safety and health standards and guidelines in this area promulgated by various governmental entities, including the Occupational Safety and Health Administration (OSHA) and the Department of Justice (relating to floor safety standards under the Americans With Disabilities Act). I have been retained, and qualified to testify at trial, as an expert on slip-and-fall investigation, prevention, and causation by the State of Texas Workers' Compensation Insurance Fund.

I have received training in floor safety and slip-and-fall prevention, investigation and causation regarding commercial and retail businesses on a continuing basis from 1986 to the present from such organizations and companies as the OSHA, ASTM, The National Safety Council, Armstrong Worldwide Industries and trade organizations like the International Sanitary Supply Association (the largest trade organization in America representing manufacturers and distributors of chemicals and cleaning products, including products related to floor care and safety).

I was asked by, and authored, OSHA's Self-Inspection Checklist regarding safe walking and working surfaces. I am the author of two books on the subject of slip-and-fall prevention entitled: "Slip & Fall Prevention Made Easy," (1999), "Falls Aren't Funny" (2010) and Floored! (2017)

I am the Founder and President of the National Floor Safety Institute (NFSI), a non-profit organization dedicated to aiding in the prevention of slip, trip-and-fall accidents through education, research, and standards development. The NFSI was founded in 1997 and is led by a fifteen-member board of directors, comprised of flooring and floor care manufacturers, industry trade associations, insurance companies, and floor mat manufacturers.

2. I am an active member of:

- a. The American Society for Testing and Materials (ASTM), including the ASTM D-21 Committee on Floor Polishes, F-13 Committee on Footwear, F-6 Committee on Resilient Floor Coverings, F-15 Committee on Consumer Products, C-21 Committee on Ceramic and Whitewares, and the E-58 Committee on Forensic Engineering. The ASTM is a voluntary standards organization composed of manufacturers who produce floor and floor care products, setting benchmarks of quality for such products. An important goal of ASTM is to promote the manufacture of safe flooring products, including the reduction of slip-and-falls.

- b. The National Safety Council (NSC). NSC is a non-profit independent organization, which educates and informs businesses in ways to improve safety in the work place. They publish magazines and books, which discuss floor safety and hold a congress each year to discuss various safety topics, including those related to slip-and-falls.
- c. The American National Standards Institute (ANSI) B101 Committee on the Prevention of Slips, trips and Falls to which I am the committee Secretary.

I graduated from Bradley University in 1985 with a Bachelor of Science degree in mathematics. Based upon my training and personal work experience, as outlined above and in my curriculum vitae, I am familiar with companies like that of the Defendants and other similar businesses and what they do to prevent workplace slips, trips-and-falls.

Nationally Recognized Industry Standards:

The American Society of Testing and Materials (ASTM) F-1637-13 entitled "Standard Practice for Safe Walking Surfaces" (enclosed) describes the standard of care by which walkways and stairs are to be maintained. Listed below are the sections of the ASTM F-1637-13 standard, which I believe are relevant in this case.

Sub-section 5.1.3 requires that; "Walkway surfaces shall be slip resistant under expected environmental conditions and use. Painted walkways shall contain an abrasive additive, cross cut grooving, texturing or other appropriate means to render the surface slip resistant where wet conditions may be reasonably foreseeable"

Section 7.1.2 "Standard Practice for Safe Walking Surfaces" requires that: "Step nosing's shall be readily discernable, slip resistant, and adequately demarcated."

The American National Standards Institute (ANSI) has a published standard A1264.2-2012 entitled "American National Standard for the Provision of Slip Resistance on Walking/Working Surfaces" which was in effect at the time of Mr. Jenkins slip-and-fall event and emphasizes the importance of protecting workers from the hazards presented by improper housekeeping, supervision, and warnings. Listed below are the standards as defined by ANSI by which serve as the standard of care for the energy production industry.

Section 8. Housekeeping

Sub-section 8.1 General. A housekeeping program shall be implemented to maintain safe walking-working surfaces.

E8.1 A written housekeeping program is recommended to ensure consistency and quality. The program should describe materials, equipment, scheduling, methods, and training of those conducting housekeeping.

Section 8.4 Supervision. The housekeeping conditions shall be monitored and a person(s) shall be authorized to promptly initiate corrective action(s).

Sub-section 8.4.1 Monitoring of areas shall include;

- a. Inspecting all walking surfaces;
- b. Arranging for prompt notification of persons responsible for cleanup of affected conditions;
- c. Placing signage, barriers or personnel until clean up is complete.

Section 9. Warnings

Sub-section 9.1 General. A warning shall be provided when a slip/fall hazard has been identified until appropriate corrections can be made and the area barricaded.

The American National Standards Institute (ANSI) A1264.1-1995 (R2002) Section 6.7 entitled “Slip Resistance” requires that: “All treads and nosing’s shall be of slip resistant material.”

The Occupational Safety and Health Administration (OSHA) Code of Federal Regulations (CFR) 1910.22 “General Requirements” requires that:

(a1) All places of employment, passageways, storerooms, and service rooms shall be kept clean and orderly and in a sanitary condition.

(a2) The floor of every workroom shall be maintained in a clean and as so far as possible, a dry condition. When wet processes are used, drainage shall be maintained, and false floors, platforms, mats, or other dry standing places should be provided where practicable.”

The Occupational Health and Safety Administration (OSHA) CFR 1910.24, Section (f) requires that “All stair treads be reasonably slip resistant and the nosing’s shall be of nonslip finish”

Opinions:

Slips and falls are a leading cause of workplace injury in the energy production industry and although the stairway in question was of an appropriate design and material, it no longer provided a slip resistant surface due to the heavy buildup of drilling mud and water as generated by the drilling operation. In order for stairs to maintain their slip resistant quality they must be properly maintained and free of contaminants. This is particularly true on oil rigs which are frequently exposed to slippery contaminants like drilling fluids, water, and oil.

When contaminated the stair tread has a significantly lower coefficient of friction level than when clean and dry and therefore the risk of a slip and fall event is heightened. It is the industry standard to immediately correct any known hazard once it has been identified. However, having reviewed the case materials it appears that the Defendants failed to exercise good judgment and simply disregarded the fact that they created a pedestrian slip hazard by way of a contaminated stairway.

The Defendants failed to maintain, inspect, warn, and remedy the dangerous condition of the stairway in question which was the proximate cause of Mr. Jenkins slip and fall event. The Defendants knew or should have known of the industry standards to which they were obligated to

follow as to protect the safety of their employees from the unnecessary risk of a slip and fall. It is my opinion that the Defendants failed to exercise reasonable care to reduce or eliminate the dangerous condition of the oil platform floor and stairway and had they done so, Mr. Jenkins fall would not have occurred. Mr. Jenkins testified that he and others voiced complaints to their management about the slippery and unsafe condition of the stairway which management failed to address. Furthermore, there is not evidence to suggest that Mr. Jenkins acted in an unreasonable manner.

Listed below is an overview of my opinions as it relates to the Defendants failures:

1. The condition of the oil rig platform and stairway at the time of Mr. Jenkins's fall constituted a dangerous condition and posed an unreasonable risk of harm.
2. The Defendants knew or reasonably should have known of the dangerous condition of the oil rig platform and stairway prior to Mr. Jenkins's slip and fall.
3. The Defendants failed to exercise reasonable care to reduce or eliminate the dangerous condition of the oil rig platform and stairway.
4. Prior to Mr. Jenkins's fall, The Defendants had sufficient time to be aware of the dangerous condition and to remedy the condition by way of cleaning off the mud.
5. The dangerous condition of the oil rig platform and stairway was the proximate cause of Mr. Jenkins's slip-and-fall event.
6. The manner of Mr. Jenkins's slip-and-fall and the dangerous condition of the stairway is consistent with the mechanics of a person falling while descending a stairway

In conclusion it is my opinion that the defendant did not exert a reasonable degree of care as it relates to properly maintaining the safety of their walkways and to protect their employees specifically Mr. Jenkins, from the risk of injury. Had the Defendants exercised a reasonable level of care of their platforms and stairways, it is more likely than not that Mr. Jenkins would not have slipped and fallen and subsequently injured himself. Sadly Mr. Jenkins slip and fall event and subsequent injuries were entirely and easily preventable had the Defendant simply complied with the industry standards detailed above which establish the means by which hotels should provide their employees and contracted employees a safe walking surface. I reserve the right to amend my opinions as new information may be presented to me in the future.

Regards,



Russell J. Kendzior
President

.encl



Designation: F1637 – 13

An American National Standard

Standard Practice for Safe Walking Surfaces¹

This standard is issued under the fixed designation F1637; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This practice covers design and construction guidelines and minimum maintenance criteria for new and existing buildings and structures. This practice is intended to provide reasonably safe walking surfaces for pedestrians wearing ordinary footwear. These guidelines may not be adequate for those with certain mobility impairments.

1.2 Conformance with this practice will not alleviate all hazards; however, conformance will reduce certain pedestrian risks.

1.3 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.4 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:²

F1646 Terminology Relating to Safety and Traction for Footwear

3. Terminology

3.1 See Terminology F1646 for the following terms used in this practice:

- 3.1.1 Bollard,
- 3.1.2 Carpet,
- 3.1.3 Cross slope,
- 3.1.4 Element,
- 3.1.5 Fair,

- 3.1.6 Footwear,
- 3.1.7 Foreseeable pedestrian path,
- 3.1.8 Planar,
- 3.1.9 Ramp,
- 3.1.10 Sidewalk,
- 3.1.11 Slip resistance,
- 3.1.12 Slip resistant,
- 3.1.13 Walkway.
- 3.1.14 Walkway surface hardware, and

4. Significance and Use

4.1 This practice addresses elements along and in walkways including floors and walkway surfaces, sidewalks, short flight stairs, gratings, wheel stops, and speed bumps. Swimming pools, bath tubs, showers, natural walks, and unimproved paths are beyond the scope of this practice.

5. Walkway Surfaces

5.1 General:

5.1.1 Walkways shall be stable, planar, flush, and even to the extent possible. Where walkways cannot be made flush and even, they shall conform to the requirements of 5.2 and 5.3.

5.1.2 Walkway surfaces for pedestrians shall be capable of safely sustaining intended loads.

5.1.3 Walkway surfaces shall be slip resistant under expected environmental conditions and use. Painted walkways shall contain an abrasive additive, cross cut grooving, texturing or other appropriate means to render the surface slip resistant where wet conditions may be reasonably foreseeable.

5.1.4 Interior walkways that are not slip resistant when wet shall be maintained dry during periods of pedestrian use.

5.2 Walkway Changes in Level:

5.2.1 Adjoining walkway surfaces shall be made flush and fair, whenever possible and for new construction and existing facilities to the extent practicable.

5.2.2 Changes in levels up to ¼ in. (6 mm) may be vertical and without edge treatment. (See Fig. 1.)

5.2.3 Changes in levels between ¼ and ½ in. (6 and 12 mm) shall be beveled with a slope no greater than 1:2 (rise:run).

5.2.4 Changes in levels greater than ½ in. (12 mm) shall be transitioned by means of a ramp or stairway that complies with applicable building codes, regulations, standards, or ordinances, or all of these.

¹ This practice is under the jurisdiction of ASTM Committee F13 on Pedestrian/Walkway Safety and Footwear and is the direct responsibility of Subcommittee F13.50 on Walkway Surfaces.

Current edition approved Aug. 1, 2013. Published August 2013. Originally approved in 1995. Last previous edition approved in 2010 as F1637 – 10. DOI: 10.1520/F1637-13.

² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

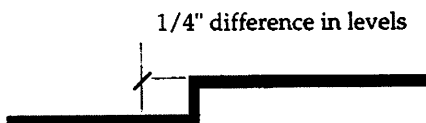


FIG. 1 Changes in Levels up to a Maximum of $\frac{1}{4}$ in. (6 mm)

5.3 Carpet:

5.3.1 Carpet shall be maintained so as not to create pedestrian hazard. Carpet shall be firmly secured and seams tightly maintained. Carpet shall not have loose or frayed edges, unsecured seams, worn areas, holes, wrinkles or other hazards that may cause trip occurrence.

5.3.2 Carpet on floor surfaces shall be routinely inspected. Periodic restretching may become necessary. Periodic inspection is particularly important at step nosing edges.

5.3.3 Carpet and carpet trim (as measured when compressed) shall meet the transition requirements of 5.2.

5.3.4 Shag-type carpet shall not be used on stair treads. Carpeting should be firmly secured onto the tread and around the nosing.

5.4 Mats and Runners:

5.4.1 Mats, runners, or other means of ensuring that building entrances and interior walkways are kept dry shall be provided, as needed, during inclement weather. Replacement of mats or runners may be necessary when they become saturated.

5.4.2 Building entrances shall be provided with mats or runners, or other means to help remove foreign particles and other contaminants from the bottom of pedestrian footwear. Mats should be provided to minimize foreign particles, that may become dangerous to pedestrians particularly on hard smooth floors, from being tracked on floors.

5.4.3 Mats or runners should be provided at other wet or contaminated locations, particularly at known transitions from dry locations. Mats at building entrances also may be used to control the spread of precipitation onto floor surfaces, reducing the likelihood of the floors becoming slippery.

5.4.4 Mats shall be of sufficient design, area, and placement to control tracking of contaminants into buildings. Safe practice requires that mats be installed and maintained to avoid tracking water off the last mat onto floor surfaces.

5.4.5 Mats, runners, and area rugs shall be provided with safe transition from adjacent surfaces and shall be fixed in place or provided with slip resistant backing.

5.4.6 Mats, runners, and area rugs shall be maintained so as not to create pedestrian hazards. Mats, runners, and area rugs shall not have loose or frayed edges, worn areas, holes, wrinkles, or other hazards that may cause trip occurrences.

5.5 Illumination:

5.5.1 Minimum walkway illumination shall be governed by the requirements of local codes and ordinances or, in their absence, by the recommendations set forth by the Illuminating Engineering Society of North America (IES) (Application and Reference Volumes).

5.5.2 Illumination shall be designed to be glare free.

5.5.3 Illumination shall be designed to avoid casting of obscuring shadows on walkways, including shadows on stairs that may be cast by users.

5.5.4 Interior and exterior pedestrian use areas, including parking lots, shall be properly illuminated during periods when pedestrians may be present.

5.6 *Headroom*—A minimum headroom clearance of 6 ft 8 in. (2.03 m), measured from the walkway surface, shall be provided above all parts of the walkway. Where such clearance is not provided in existing structures, the low clearance portions of the walkway shall be safely padded, marked with safety contrast color coding and posted with appropriate warning signs.

5.7 Exterior Walkways:

5.7.1 Exterior walkways shall be maintained so as to provide safe walking conditions.

5.7.1.1 Exterior walkways shall be slip resistant.

5.7.1.2 Exterior walkway conditions that may be considered substandard and in need of repair include conditions in which the pavement is broken, depressed, raised, undermined, slippery, uneven, or cracked to the extent that pieces may be readily removed.

5.7.2 Exterior walkways shall be repaired or replaced where there is an abrupt variation in elevation between surfaces. Vertical displacements in exterior walkways shall be transitioned in accordance with 5.2.

5.7.3 Edges of sidewalk joints shall be rounded.

6. Walking Surface Hardware

6.1 Walking surface hardware within foreseeable pedestrian paths shall be maintained flush with the surrounding surfaces; variances between levels shall be transitioned in accordance with 5.2.

6.2 Walking surface hardware within foreseeable pedestrian paths shall be maintained slip resistant.

6.3 Walking surface hardware shall be installed and maintained so as to be stable under reasonable foreseeable loading.

7. Stairs

7.1 General:

7.1.1 Stairways with “distracting” forward or side views shall be avoided. A “distracting” view is one which can attract the stair user’s attention, (for example, advertisements, store displays), thus distracting the stair user.

7.1.2 Step nosings shall be readily discernible, slip resistant, and adequately demarcated. Random, pictorial, floral, or geometric designs are examples of design elements that can camouflage a step nosing.

7.1.3 Doors shall not open over stairs.

7.1.4 Structure (reserved).

7.2 Short Flight Stairs (Three or Fewer Risers):

7.2.1 Short flight stairs shall be avoided where possible.

7.2.2 In situations where a short flight stair or single step transition exists or cannot be avoided, obvious visual cues shall be provided to facilitate improved step identification. Handrails, delineated nosing edges, tactile cues, warning signs, contrast in surface colors, and accent lighting are examples of some appropriate warning cues.



8. Speed Bumps

8.1 Design to avoid the use of speed bumps.

8.2 All speed bumps which are in foreseeable pedestrian paths shall comply with 5.2 (walkway changes in level).

8.3 Existing speed bumps, that do not conform to 5.2, shall be clearly marked with safety color coding to contrast with surroundings. Painted speed bumps shall be slip resistant. Pedestrian CAUTION signs are recommended.

9. Wheel Stops

9.1 Parking lots should be designed to avoid the use of wheel stops.

9.2 Wheel stops shall not be placed in pedestrian walkways or foreseeable pedestrian paths.

9.3 Wheel stops shall be in contrast with their surroundings.

9.4 Wheel stops shall be no longer than 6 ft (1.83 m) and shall be placed in the center of parking stalls. The minimum width of pedestrian passage between wheel stops shall be 3 ft (0.91 m).

9.5 The top of wheel stops shall not exceed 6.5 in. (165 mm) in height above the parking lot surface.

9.6 Adequate illumination shall be maintained at wheel stops as governed by the requirements of local codes and ordinances or, in their absence, by the recommendations set forth by the Illuminating Engineering Society of North America (IES-Application and Reference Volumes).

9.7 Bollards, not less than 3 ft 6 in. (1.07 m) height, may be placed in the center of parking stalls as an alternative to wheel stops. Bollards should be appropriately marked to enhance visibility.

10. Gratings

10.1 Gratings used in public areas should be located outside of pedestrian walkways.

10.2 Gratings located in foreseeable pedestrian walkways shall not have openings wider than ½ in. (13 mm) in the direction of predominant travel.

10.2.1 *Exemption*—The requirements of 10.2 do not apply in areas where footwear worn is controlled (for example, industrial areas).

10.3 Gratings with elongated openings shall be placed with the long dimension perpendicular to the direction of predominant travel.

10.4 Gratings shall be maintained slip resistant.

11. Warnings

11.1 The use of visual cues such as warnings, accent lighting, handrails, contrast painting, and other cues to improve the safety of walkway transitions are recognized as effective controls in some applications. However, such cues or warnings do not necessarily negate the need for safe design and construction.

11.2 When relying on applications of color as a warning, provide colors and patterns that provide conspicuous markings for the conditions being delineated, their surroundings, and the environment in which they will be viewed by users. Bright yellow is a commonly used color for alerting users of the presence of certain walkway conditions. When properly applied and maintained, other colors can also provide effective warnings.

12. Keywords

12.1 carpet; floors; gratings; mats; runners; sidewalks; short flight stairs; slip resistance; speed bump; stairs; walkway; wheel stop

ASTM International takes no position respecting the validity of any patent rights asserted in connection with any item mentioned in this standard. Users of this standard are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, are entirely their own responsibility.

This standard is subject to revision at any time by the responsible technical committee and must be reviewed every five years and if not revised, either reapproved or withdrawn. Your comments are invited either for revision of this standard or for additional standards and should be addressed to ASTM International Headquarters. Your comments will receive careful consideration at a meeting of the responsible technical committee, which you may attend. If you feel that your comments have not received a fair hearing you should make your views known to the ASTM Committee on Standards, at the address shown below.

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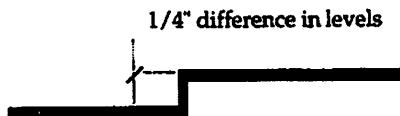


FIG. 1 Changes in Levels up to a Maximum of 1/4 in. (6 mm)

5.3 Carpet:

5.3.1 Carpet shall be maintained so as not to create pedestrian hazard. Carpet shall be firmly secured and seams tightly maintained. Carpet shall not have loose or frayed edges, unsecured seams, worn areas, holes, wrinkles or other hazards that may cause trip occurrence.

5.3.2 Carpet on floor surfaces shall be routinely inspected. Periodic restretching may become necessary. Periodic inspection is particularly important at step nosing edges.

5.3.3 Carpet and carpet trim (as measured when compressed) shall meet the transition requirements of 5.2.

5.3.4 Shag-type carpet shall not be used on stair treads. Carpeting should be firmly secured onto the tread and around the nosing.

5.4 Mats and Runners:

5.4.1 Mats, runners, or other means of ensuring that building entrances and interior walkways are kept dry shall be provided, as needed, during inclement weather. Replacement of mats or runners may be necessary when they become saturated.

5.4.2 Building entrances shall be provided with mats or runners, or other means to help remove foreign particles and other contaminants from the bottom of pedestrian footwear. Mats should be provided to minimize foreign particles, that may become dangerous to pedestrians particularly on hard smooth floors, from being tracked on floors.

5.4.3 Mats or runners should be provided at other wet or contaminated locations, particularly at known transitions from dry locations. Mats at building entrances also may be used to control the spread of precipitation onto floor surfaces, reducing the likelihood of the floors becoming slippery.

5.4.4 Mats shall be of sufficient design, area, and placement to control tracking of contaminants into buildings. Safe practice requires that mats be installed and maintained to avoid tracking water off the last mat onto floor surfaces.

5.4.5 Mats, runners, and area rugs shall be provided with safe transition from adjacent surfaces and shall be fixed in place or provided with slip resistant backing.

5.4.6 Mats, runners, and area rugs shall be maintained so as not to create pedestrian hazards. Mats, runners, and area rugs shall not have loose or frayed edges, worn areas, holes, wrinkles, or other hazards that may cause trip occurrences.

5.5 Illumination:

5.5.1 Minimum walkway illumination shall be governed by the requirements of local codes and ordinances or, in their absence, by the recommendations set forth by the Illuminating Engineering Society of North America (IES) (Application and Reference Volumes).

5.5.2 Illumination shall be designed to be glare free.

5.5.3 Illumination shall be designed to avoid casting of obscuring shadows on walkways, including shadows on stairs that may be cast by users.

5.5.4 Interior and exterior pedestrian use areas, including parking lots, shall be properly illuminated during periods when pedestrians may be present.

5.6 **Headroom**—A minimum headroom clearance of 6 ft 8 in. (2.03 m), measured from the walkway surface, shall be provided above all parts of the walkway. Where such clearance is not provided in existing structures, the low clearance portions of the walkway shall be safely padded, marked with safety contrast color coding and posted with appropriate warning signs.

5.7 Exterior Walkways:

5.7.1 Exterior walkways shall be maintained so as to provide safe walking conditions.

5.7.1.1 Exterior walkways shall be slip resistant.

5.7.1.2 Exterior walkway conditions that may be considered substandard and in need of repair include conditions in which the pavement is broken, depressed, raised, undermined, slippery, uneven, or cracked to the extent that pieces may be readily removed.

5.7.2 Exterior walkways shall be repaired or replaced where there is an abrupt variation in elevation between surfaces. Vertical displacements in exterior walkways shall be transitioned in accordance with 5.2.

5.7.3 Edges of sidewalk joints shall be rounded.

6. Walking Surface Hardware

6.1 Walking surface hardware within foreseeable pedestrian paths shall be maintained flush with the surrounding surfaces; variances between levels shall be transitioned in accordance with 5.2.

6.2 Walking surface hardware within foreseeable pedestrian paths shall be maintained slip resistant.

6.3 Walking surface hardware shall be installed and maintained so as to be stable under reasonable foreseeable loading.

7. Stairs

7.1 General:

7.1.1 Stairways with “distracting” forward or side views shall be avoided. A “distracting” view is one which can attract the stair user’s attention, (for example, advertisements, store displays), thus distracting the stair user.

7.1.2 Step nosings shall be readily discernible, slip resistant, and adequately demarcated. Random, pictorial, floral, or geometric designs are examples of design elements that can camouflage a step nosing.

7.1.3 Doors shall not open over stairs.

7.1.4 Structure (reserved).

7.2 Short Flight Stairs (Three or Fewer Risers):

7.2.1 Short flight stairs shall be avoided where possible.

7.2.2 In situations where a short flight stair or single step transition exists or cannot be avoided, obvious visual cues shall be provided to facilitate improved step identification. Handrails, delineated nosing edges, tactile cues, warning signs, contrast in surface colors, and accent lighting are examples of some appropriate warning cues.



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8. Speed Bumps

8.1 Design to avoid the use of speed bumps.

8.2 All speed bumps which are in foreseeable pedestrian paths shall comply with 5.2 (walkway changes in level).

8.3 Existing speed bumps, that do not conform to 5.2, shall be clearly marked with safety color coding to contrast with surroundings. Painted speed bumps shall be slip resistant. Pedestrian CAUTION signs are recommended.

9. Wheel Stops

9.1 Parking lots should be designed to avoid the use of wheel stops.

9.2 Wheel stops shall not be placed in pedestrian walkways or foreseeable pedestrian paths.

9.3 Wheel stops shall be in contrast with their surroundings.

9.4 Wheel stops shall be no longer than 6 ft (1.83 m) and shall be placed in the center of parking stalls. The minimum width of pedestrian passage between wheel stops shall be 3 ft (0.91 m).

9.5 The top of wheel stops shall not exceed 6.5 in. (165 mm) in height above the parking lot surface.

9.6 Adequate illumination shall be maintained at wheel stops as governed by the requirements of local codes and ordinances or, in their absence, by the recommendations set forth by the Illuminating Engineering Society of North America (IES-Application and Reference Volumes).

9.7 Bollards, not less than 3 ft 6 in. (1.07 m) height, may be placed in the center of parking stalls as an alternative to wheel stops. Bollards should be appropriately marked to enhance visibility.

10. Gratings

10.1 Gratings used in public areas should be located outside of pedestrian walkways.

10.2 Gratings located in foreseeable pedestrian walkways shall not have openings wider than ½ in. (13 mm) in the direction of predominant travel.

10.2.1 *Exemption*—The requirements of 10.2 do not apply in areas where footwear worn is controlled (for example, industrial areas).

10.3 Gratings with elongated openings shall be placed with the long dimension perpendicular to the direction of predominant travel.

10.4 Gratings shall be maintained slip resistant.

11. Warnings

11.1 The use of visual cues such as warnings, accent lighting, handrails, contrast painting, and other cues to improve the safety of walkway transitions are recognized as effective controls in some applications. However, such cues or warnings do not necessarily negate the need for safe design and construction.

11.2 When relying on applications of color as a warning, provide colors and patterns that provide conspicuous markings for the conditions being delineated, their surroundings, and the environment in which they will be viewed by users. Bright yellow is a commonly used color for alerting users of the presence of certain walkway conditions. When properly applied and maintained, other colors can also provide effective warnings.

12. Keywords

12.1 carpet; floors; gratings; mats; runners; sidewalks; short flight stairs; slip resistance; speed bump; stairs; walkway; wheel stop

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AMERICAN NATIONAL STANDARD

ANSI/ASSE A1264.2 – 2012
Provision of Slip Resistance
on Walking/Working Surfaces

ANSI/ASSE A1264.2 – 2012



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provide proper lighting for safety.

6.1.1 Transitions between bright and dark areas (and vice-versa) should be as gradual as possible, allowing time for eyes to adjust to change in lighting.

6.1.2 Lighting design must:

6.1.2.1 Minimize instances of shadows, which can obscure hazardous conditions and floor transitions.

6.1.2.2 Avoid creating glare, which can temporarily impair vision increasing the potential for falling.

6.1.2.3 Not depend on a single lighting unit, which if inoperable can result in poor light levels.

6.1.2.4 Consider that older populations require greater levels of lighting than younger populations, due to reduced visual acuity that develops with age.

E6.1.2.3 Use of redundant lighting systems is recommended.

7. FLOOR MATS AND RUNNERS

Mats and runners, or other comparable alternatives, shall be used when walking surfaces do not meet the guideline set forth in Section E12.2 of this standard.

E7 See ASTM F1637, *Standard Practice for Safe Walking Surfaces*. Mats and/or runners placed at appropriate locations to help remove contaminants (e.g., oils, solvents, water, dusts, sand, gravel, soil, flour) from the bottoms of footwear and help keep the floor in a clean and dry condition. As a rule of thumb, footprints or water prints should not be seen on the floor beyond the last mat of an installation.

7.1 Location. Floor mats and/or runners, or other appropriate methods, shall be at building entries and in areas where it may be foreseen that operations may encounter contaminants on floor surfaces that are not considered sufficiently slip resistant.

E7.1 Examples of areas which may benefit from mat installation include: machinery process areas; areas adjacent water fountains; food counters and food preparation areas; adjacent drink stations; under and around sinks at ice stations and freezers/coolers; near machinery and other areas where spills may occur.

7.2 General Design. Floor mats designed for removal of dust, dirt and moisture from the footwear bottom and

E7.2 Mats should be constructed with a slip resistant backing (to prevent sliding of the mat) and a minimal height profile (see

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wheeled traffic at building entrances and other appropriate location shall be used.

Section 7.4) to reduce the potential for tripping).

Entry Design. Providing mats or carpeting in the foyer, especially during inclement weather, helps to remove dirt, ice-melt chemicals and moisture from footwear bottoms. A well-maintained grate system with drainage can be used in entry foyers to remove moisture from footwear.

A well-designed and maintained mat system can prevent most dirt and other contaminants from entering the building. This reduces cleaning efforts; extends the life and helps maintain the appearance of hard mineral surfaces; and reduces the potential for slip/falls due to floor contaminants.

Many times, mats are purchased that are too small to be effective. The Carpet and Rug Institute (CRI) Commercial Carpet Maintenance Manual defines an entrance (or soil wipe-off) area as the 90 square feet (6 feet x 15 feet) at building exterior entrances, where most tracked-in soil is deposited. CRI research shows that 80% of the soil brought into a building is trapped within the first 15 feet of a carpeted surface.

7.3 Mat Installation. Mats and runners shall be installed and maintained not to move when in use.

E7.3 Mats and runners without slip-resistant backing can be hazardous to users. While all mats and runners can creep, they should not slide or buckle. Mats and runners should not require securement unless unexpected sliding, excessive mat creep or buckling is experienced. If securement is needed, hook and loop fasteners (such as Velcro®) or other manufacturer-recommended controls should be used. Heavier mats with denser backings are less flexible and also less subject to creeping, sliding and buckling.

7.3.1 Mat Size. Where practical, a single larger mat should be used instead of multiple smaller mats.

E7.3.1 Using a larger mat instead of several smaller mats decreases the potential for movement. Also, there are fewer gaps and reduced potential for overlap when using a larger mat, thus minimizing these potential tripping hazards.

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7.4 Installation. Mats shall be installed so that they do not create tripping hazards. Mats and runners that are not recessed shall have a beveled or graduated edge or other appropriate treatment to help reduce the possibility of tripping on the mat edge.

7.4.1 Layout. Mats and runners shall be laid out to avoid overlap or gaps between them to provide a continuous walkway path.

7.5 Inspection and Maintenance. Mats and runners shall be routinely inspected and adequately maintained to identify and correct conditions such as buckling, edge curling and other defects. Damaged mats shall be promptly replaced.

7.6 Storage and Care. Procedures shall be established for the placement, maintenance, inspection and storage of mats in accordance with manufacturer's instructions. In the absence of such instructions, mats and runners shall be stored in a way that allows them to lie flat when in use.

7.7 Cleaning and Trade-Out. To maintain effective soil pick-up and track-control, and slip resistance, mats shall receive scheduled cleanings or trade-out of appropriate frequency based on the conditions to which they are subject.

8. HOUSEKEEPING

8.1 General. A housekeeping program shall be implemented to maintain safe walking-working surfaces.

Larger mats tend to remain in place better than a smaller mat due to greater weight and larger dimensions.

E7.4 Vertical edges of mats and runners should not be greater than 1/4 inch. Abrupt vertical edges greater than 1/4 inch up to 1/2 inch should be beveled at a slope no greater than 1:2. Abrupt vertical changes greater than 1/2 inch should not be permitted.

E7.5 Routine inspections will quickly identify and help prioritize issues/problems related to adequate securement, contaminant saturation level, curling, buckling and rippling, displacement and other potentially hazardous conditions. Immediate remediation is recommended when a potentially hazardous condition is observed.

E7.6 Storage procedures should be in conformance with manufacturers specifications. Also see Section 8: Housekeeping.

Note: In the context of Section 7.6, flat means there is no buckling, rippling or curling of the mat edges when it is laid out.

E7.7 According to CRI's manual for school facilities, "Walk-off mats should be cleaned frequently. Once a walk-off mat becomes filled with soil, the soil will then transfer to the soles of shoes and spread throughout the facility."

E8.1 A written housekeeping program is recommended to ensure consistency and quality. The program should describe materials, equipment, scheduling, methods and training of those conducting housekeeping.

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8.2 Maintenance Procedures. Written procedures, if in place, shall specify cleaning and maintenance procedures including immediate response, routine operations, remedial measures and reporting requirements.

E8.2 Procedures should be reviewed regularly and updated as needed so that an effective program is maintained. Drains should be kept clear and free flowing. Certain spills involving hazardous chemicals may be subject to regulatory reporting.

Periodic slip resistance testing of floor surfaces can be of value in the following situations:

- If a treatment or coating has been applied to the floor surface which may deteriorate over time.
- To monitor for floor cleanliness.
- There is no available history of slips and falls at the facility.
- To evaluate prospective flooring materials prior to installation.

8.3 Training. Housekeeping staff, contractors and other persons with the responsibility of a given area shall be trained in:

- a. Inspection, maintenance and cleaning requirements;
- b. Inspection, maintenance and cleaning procedures;
- c. Safe handling and disposal of chemicals and/or solutions;
- d. Safe operations of maintenance and cleaning equipment;
- e. Emergency conditions and operations;
- f. Recordkeeping and reporting relating to housekeeping and maintenance.

E8.3 Under the Hazard Communication Act (HAZCOM) workers may be subject to the Hazard Communication Act (HAZCOM) if exposed to certain chemicals.

For more information about training, consult ANSI/ASSE Z490.1, *Accepted Practices for Safety, Health and Environmental Training*.

8.4 Supervision. The housekeeping conditions shall be monitored and a person(s) shall be authorized to promptly initiate corrective action(s).

E8.4 An effective program requires employees to identify and report potential hazards to appropriate supervision. Documentation of monitoring can assist in identifying hazards (e.g., areas where repeated spills occur), which will permit better planning and anticipation of such events.

8.4.1 Monitoring. Monitoring of areas shall include:

E8.4.1 See Section 9: Warnings.

- a. Inspecting all walking surfaces.
- b. Arranging for prompt notification of persons responsible for clean up of hazardous conditions.
- c. Placing signage, barriers or personnel until clean up is complete.

8.5 Use of Granular Absorbents. The use of granular absorbents where processes or the environment creates slip hazards shall be acceptable treatment in reducing slip hazards where other control methods are not feasible. The absorbent shall be swept up and replaced before the absorbent has been fully saturated.

9. WARNINGS/BARRICADES

9.1 General. A warning shall be provided when a slip or trip hazard has been identified until appropriate corrections can be made or the area barricaded.

9.1.1 Alternate Route. When a slip/fall hazard covers an entire walkway, making it difficult to safely route personnel around the hazard, barricades shall be used to limit access (see Section 10.1). If appropriate, assign a person(s) to detour pedestrians in conjunction with the appropriate use of warning signs until the barricade can be erected or the hazard removed.

9.2 Signage. The signage reference for warning signs used for slip/fall hazards shall be ANSI Z535.2, *Standard for Environmental and Facilities Safety Signs*.

E9.1 Slip/trip hazards should be eliminated by design and arrangement if possible. The next priority is to guard the hazard if possible, and the last priority is to warn of a hazard. The intent is to eliminate and/or reduce, as much as possible, the potential for injury.

E9.2 The ANSI Z535 standards provide for the design, application and use of signs and placards in creating a uniform visual alert system. They are available from the NEMA (The Association of Electrical Equipment and Medical Imaging Manufacturers), 1300 North 17th Street, Arlington, Virginia or at the website: <http://www.nema.org/>.

9.3 Symbols. Warning signs using symbols shall use ANSI Z535.3, *Criteria for Safety Symbols*.

9.4 Placement. Warning signs shall be placed at approaches to, or around, areas where slip/fall hazards are foreseeable. These devices shall surround or be placed around the perimeter of the hazardous area to clearly demarcate the location of the potential hazard.

9.4.1 Unmitigated Hazards. In cases where hazards cannot be mitigated, warning signs and barricades shall be used to reroute traffic.

E9.4.1 Warning signs may be ineffective for the control of slip and fall hazards in areas where routing pedestrian traffic around the hazard is difficult to accomplish, such as where the danger lies on a shorter path than the safe route. In such instances, barricading the area in conjunction with appropriate warning signs to reroute employee traffic to an entirely different route may be required.

Barricades and warning signs should be used in hazardous areas. See Section 10: Inherently Slippery Environments for details on the use of barricades.

9.4.2 Removal of Hazard. When the hazard has been eliminated or controlled, the sign and/or barricade shall be promptly removed.

E9.4.2 Leaving signage/barricades after hazardous conditions have been remediated can lead to complacency.

10. INHERENTLY SLIPPERY ENVIRONMENTS

In inherently slippery environments, an effective combination of multiple controls shall be implemented.

E10 Examples of inherently slippery environments include chemical processes, food processing and rendering and other operations likely to result in liquid contamination of walking/working surfaces. Training of persons to safely use such areas is highly recommended. The use of the procedures outlined in Section 8 are recommended as minimum training guidelines.

10.1 Barricades. Barricades shall be used to isolate processes in hazardous areas. They shall also be used to isolate slip hazards from pedestrian traffic.

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10.2 Containment. Where spills, leakage or other emissions are anticipated, provisions shall be made to contain the spillage away from the walkway.

10.3 Authorized Entry. In certain inherently slippery areas, only employees who are properly trained and equipped shall be authorized to enter.

10.4 Signage Considerations. Signage for inherently slippery environments shall be in place in accordance with Sections 9.2, 9.3 and 9.4 of this standard.

11. SELECTION AND/OR TREATMENT

11.1 Safely Maintained. Walking surfaces for use in accordance with 2.3 shall be safely maintained.

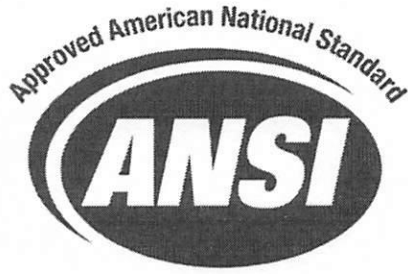
11.2 Practical Considerations. Where it is not practical to replace flooring, etching, scoring, grooving, brushing, appliques, coatings and other such techniques shall be used to achieve acceptable slip resistance under foreseeable conditions.

E10.2 Examples of containment include proper drainage, scupper curbing, dikes, drip pans and operational enclosures. Some barricades may be methods of containment.

E10.3 Processes may have to be shut down for special cleanup operations. Equipment may include full personal protective equipment, lifelines, harnesses and/or special footwear. See Appendix A for slip-resistant footwear considerations.

E11 Reference to ASTM F802, *Standard Guide for Selection of Certain Walkway Surfaces When Considering Footwear Traction*. Consideration should be given towards replacement of the flooring with a different material having more pronounced surface asperities. Textured surface coatings are a viable selection alternative. The material selection should be determined based upon testing of the surface with an appropriate slip testing device.

E11.2 Surfacing applications and/or treatments are available that can impart increased slip resistance to problem surfaces. Some flooring surfaces can be enhanced by etching. Certain paint-on or trowel-on applications can enhance slip resistance. It is important to select one that will adhere tenaciously to the substrate. Cleanability and durability should be considered. Patch testing of prospective materials in the problem environment is recommended before proceeding with broad application. Carpeting is also an option worthy of consideration for control of slips.



AMERICAN NATIONAL STANDARD

*safety requirements for
workplace floor and wall openings,
stairs and railing systems*

ANSI A1264.1-1995 (R2002)



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6.5 Tread Width and Riser Height. Any uniform combination of tread-riser dimensions shall be used that results in a stairway at an angle to the horizontal within the permissible range; but minimum tread width and maximum riser height shall be 9 1/2 inches (240 mm).

6.6 Nosing. Nosing shall have an even leading edge and not extend more than 1 1/2 inches (38 mm) beyond the face of the lower riser.

6.7 Slip Resistance. All treads and nosings shall be of slip resistant material.

6.8 Uniformity of Risers and Treads. Riser height and tread depth shall be uniform throughout any flight of stairs including any foundation structure used as one or more treads of the stairs.

6.9 Long Flights of Stairs. Flights of stairs, uninterrupted by landings, or intermediate platforms shall be avoided.

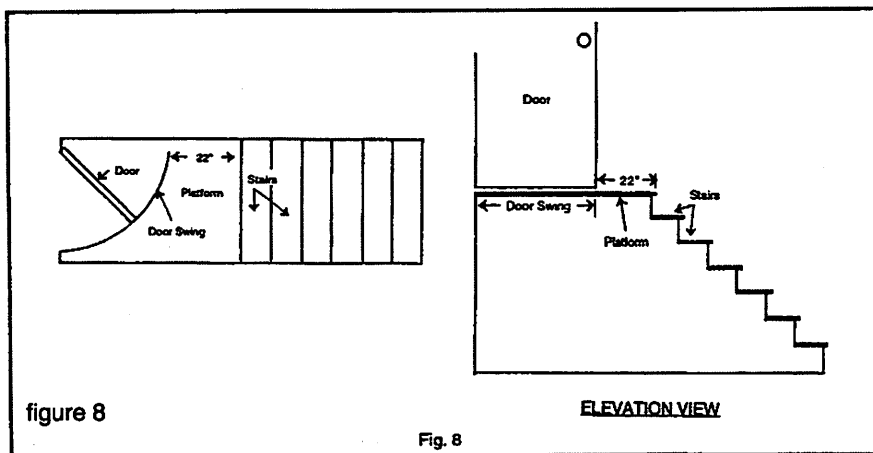
E.6.9 Flights (runs) of stairs are generally 12 feet (3.66 m) but no more than 15 feet (4.5 m).

6.10 Stair Landing. Stair landings shall be no less than the width of the stair and a minimum of 30 inches (760 mm) in length measured in the direction of travel along the centerline of the landing.

6.11 Door and Gate Openings. Where doors or gates open directly on a stairway, a platform shall be provided, and the swing of the door shall not reduce the effective usable width to less than 22 inches (560 mm).

E.6.11 See Figure 8.

6.12 Vertical Clearance. Vertical clearance above any stair tread to an overhead obstruction shall be at least seven (7) feet (1.8 m) measured from the leading edge of the tread.



6.13 Open Risers. Stairs having treads of less than 9 1/2 inches (240 mm) in width shall have open risers.

E.6.13 Open risers are needed on certain narrow tread and steep angled stair systems and exterior structures. Some examples are: step ladders, alternating tread type stairs and spiral stairs as allowed by the standard.



Russell J. Kendzior

Experience:

2014 – Present - President, Traction Experts, Inc.

Internationally recognized safety expert specializing in slip, trip and fall prevention. Industry consultant with experience in developing corporate safety policies, employee safety training programs and procedures. Retained as an expert witness in more than 800 cases representing both Plaintiffs and Defendants. Qualified as an expert in state, county, and federal courts across the country.

1997-Present - Founder & Chairman of the Board of the National Floor Safety Institute (NFSI)

Founder of the NFSI in 1997 as a 501(c)-3 not-for-profit organization whose mission is to mission is to “aid in the prevention of slip’s, trip’s-and-fall’s through education, research, and standards development”. The NFSI is led by a fifteen-member board of directors representing a wide-range of product manufacturers, insurance companies, and independent researchers. Frequent lecturer and consultant, to major corporations, trade associations, universities, and governmental and regulatory agencies.

1990-2014 - President, Traction Plus, Inc.

Internationally recognized as the leader in slip, trip and fall prevention. Developer of a complete line of slip-and-fall prevention products marketed under the Traction Plus® and SlipShield® brands. Released the first-of-its-kind line of floor safety products integrating state of the art technology. Developed Traction Plus TRED SAFE® footwear in partnership with Wal-Mart Stores U.S.A. and Canada.

1986-1990 Contract Sales Manager - The Adleta Company, Carrollton, TX

Responsibilities included: the management of a multimillion-dollar territory for Armstrong World Industries (North Texas region), the development of retail and commercial markets, training end-users, contractors, and architectural/design professionals as to the proper specification, installation and maintenance procedures for resilient floor coverings.

Education:

BS Mathematics, Bradley University, 1985

Professional Training:

U.S. Department of Labor Occupational Safety and Health Administration (OSHA)

*Texas Accessibility Academy, Texas Department of Licensing and Regulation Compliance Division
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American National Standards Institute (ANSI) Walkway Auditor Certificate Holder (WACH)

Professional Licenses:

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Professional Certifications:

National Floor Safety Institute (NFSI) ANSI Walkway Auditor Certificate Holder (WACH #3)

Professional Associations:

American National Standards Institute (ANSI) Committee Secretary - NFSI B101 "Safety Requirements for Slip, Trip, and Fall Prevention"

American Society for Testing and Materials (ASTM) - Voting Member on seven sub-committees including: C-21 Ceramic Tile, D-13 Textiles, D-21 Polishes, E-58 Forensic Engineering, F-06 Resilient Floor Coverings, F-13 Walkway Safety and Footwear, C-14 Glass and Glass Products, and F-15 Consumer Products.

National Safety Council (NSC) – Member of the Board of Delegates

American Society of Safety Professionals (ASSP), Professional Member

The Society of Protective Coverings (SSP C.7.5 Texture of Concrete Coatings)

The Association of Certified Fraud Examiners (ACFE)

Accessibility Professionals Association (APA)

National Speakers Association (NSA)

Government and Regulatory Agency:

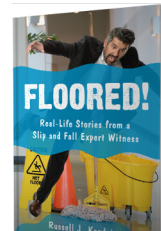
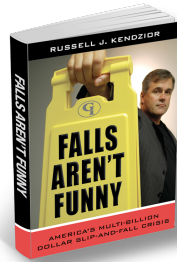
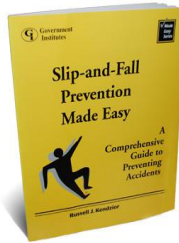
U.S. Department of Labor, Occupational Health and Safety Administration (OSHA). Recognized by OSHA as an expert on walking and working surfaces and provided expert testimony before an OSHA hearing on the subject in 2011. Cited authority in the 2016 revised U.S. Code of Federal Regulations (CFR) Sub-Part D. Section 1910 (OSHA) Rule for Walking and Working Surfaces.

U.S. Consumer Product Safety Commission (CPSC). Have testified before the CPSC on advancing elder fall prevention/pedestrian walkway safety.

Centers for Disease Control and Prevention (CDC). Have worked with CDC on measures to advance slip, trip and fall prevention.

Publications:

Books:



Russell J. Kendzior is the author of three books on the subject of slip, trip-and-fall accident prevention including: **“Slip and Fall Prevention Made Easy”** (© 1999) and **“Falls Aren’t Funny”** published in 2010 and named the Number 1. Best Seller in Personal Injury Law by Amazon.com and **Floored!** (2017)

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Services Magazine

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July 2000: "Confronting the Age-Old Problem"

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Commercial Risk

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Commercial Floor Care

December 2000: "Elevating Floor Care to Floor Safety"



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April 2004: Cover Story "Slip and Fall, Who's Got Your Back?"

New York Times

January 18, 2004: "Marble Baths: Watch your Step"

Concrete News

August 2004: "The Hard Truth About Concrete Safety"

October 2010: "Is Concrete Slippery?"

Summer 2015: "CAUTION Is Polished Concrete Slippery?"

Concrete Construction

December 3, 2010: "Giving Slips the Slip"



Executive Housekeeping Today (EHT)

Cover Story July 2012 "Elevating Floor Care to Floor Safety"

Housekeeping Solutions Magazine

March/April 2013 "Standardizing Floor Mats"

Huffington Post

June 21, 2003 Floored! Safety Tips from Fall's Aren't Funny Author Russ Kendzior

The Expert Institute (theexpertinstitute.com)

July 7, 2014 Trips, Slips and Falls – New National Standards Certain to be a Game Changer



Contributing Editor (2014-2016), Attorney at Law Magazine (Dallas, Texas Edition)



L&M Concrete News

August 2015 - How do you Know if Polished Concrete is Slippery?

Professional Seminars and Public Speaking Engagements:

College, University Presentations:

Georgia Tech OSHA Outreach
Murray State University
Southeast Oklahoma State University (SOSU)
Emory University
University of Tennessee (Knoxville)
University of Central Florida

Professional and Trade Associations:

American Society of Safety Professionals (ASSP)
American Association of Mechanical Engineers (ASME) International Expo and Congress 2014
International Sanitary Supply Association (ISSA)
American Association of Fraud Examiners (ACFE)
National Safety Council (NSC)
Virginia Association of Counties

International Textile Rental Association (ITRA)
Cleaning Management Institute (CMI)

Simon Institute

International Executive Housekeepers Association (IEHA)

Food Marketing Institute (FMI) 2010 Asset Protection Conference for Risk Management, Loss Prevention and Safety Professionals

Institute of Inspection, Cleaning and Restoration (IICRC)

National Restaurant Association (NRA)

Hospitality Lawyer

Houston Trial Lawyers Association (HTLA)

International Facilities Maintenance Association (IFMA)

International Window Cleaning Association (IWCA)

Voluntary Protection Programs Participants Association (VPPPA)

Strafford Publications Spoliation of Evidence Webinar

CSC Network

International Ergonomics Association 19th Triennial Congress Melbourne Australia

Restaurant Loss Prevention & Security Association (RLPSA)

Construction Specifications Institute (CSI)

National Safety Council (NSC)

Slip Resistance Group Spain (SRGS) Madrid, Spain.

Corporate Training:

AIG Insurance

Allied Insurance

CNA Insurance

Willis Insurance

State Farm Insurance

Midwest Employers Casualty Company (MWECC)

McDonald's Corporation

U.S. Department of Defense (DOD)

Home Depot

Yum! Brands

Dal-Tile Corporation

Tennant Corporation

Mountville Mills, Inc.

Proctor & Gamble Corporation

Ecolab Corporation

Rubbermaid Corporation

Cintas Corporation

Armstrong World Industries

Professional Business Partners (PBP)

USI Annual Risk Management Safety Day 2014

Smithsonian Institute

Laticrete Corporation

J&J Carpet Company

Wakefern Corporation (Shop Rite Supermarkets)

New Pig Corp.

J.J. Keller Corporation

Media Interviews:

Inside Edition

Public Television (PBS) "Spotlight On" Program

ABC News "Good Morning America" and "What Would You Do" programs